REMARKS

By the above amendment, the term "side" has been deleted from the claims with respect to the phrase "inner side wall" with claim 1 being amended to clarify the feature that the electrically conductive member is disposed within the reaction chamber, which feature is recited in dependent claim 4. Additionally, new dependent claims 13 and 14 have been presented, wherein claim 13 recites the feature that the electrically conductive member is disposed within the reaction chamber and is electrically connected to earth by a wire extending through the inner wall of the reaction chamber, as clearly illustrated in Fig. 2 of the drawings of this application, for example. Additionally, new dependent claim 14 further defines the positioning of the electrically conductive member within the reaction chamber so as to enable suppression of chipping of the surface portion of the inner wall of the reaction chamber, as described with regard to Fig. 3 in the first paragraph at page 21 of the specification, for example.

The rejection of claims 1, 2, 4, 5, 7, 8, and 10 - 12 under 35 USC 103(a) as being unpatentable over Kadomura (US 6,391,437B1) in view of Kawasaki (US 4,795,529A), is traversed insofar as it is applicable to the present claims and insofar as the rejection is understood, and reconsideration and withdrawal of the rejection are respectfully requested.

In applying Kadomura to the claimed invention, the Examiner indicates various features as indicated in the paragraph bridging pages 2 and 3 of the office action. Thereafter, the Examiner states that "Kadomura further teaches:" and sets forth a paragraph of what Kadomura teaches." However, subsequent to the aforementioned paragraph, about the middle of page 3 of the office action, the Examiner sets forth that: "Kadomura does not teach:" (emphasis added) and follows

with several sections labeled i-x, with the Examiner apparently admitting that Kadomura does not teach any of the features of sections i-x. In the Examiner's acknowledgement of the deficiencies of Kadomura, as clearly set forth at pages 3 - 7 of the office action irrespective of the various figures referred to by the Examiner, none of the figures disclose nor is there a description in Kadomura which an electrically conductive member disposed within the reaction chamber at a position with respect to the inner wall of the reaction chamber which is covered with the dielectric, that the electrically conductive member is electrically coupled to earth one of directly and through the inner wall of the reaction chamber so as to form a DC earth which enables direct current to flow therein from the plasma, that the electrically conductive member has an area in a range of 0.1% to 10% of the inner wall area of the reaction chamber, or that the electrically conductive member forming DC earth is disposed at a position crossing a magnetic line of force that is closer to the substrate holder than a magnetic line of force that crosses the inner wall of the reaction chamber having the dielectric thereon. While the Examiner apparently refers to various figures of Kadomura including Fig. 16 and possibly Fig. 22b, although Kadomura refers to Fig. 22B, it is not seen that Fig. 16 illustrates or there is any disclosure of an electrically conductive member arranged within the chamber 21, which is necessarily a reaction chamber, and having the structural features as recited in claim 1 or any of the dependent claims. Thus, based upon the Examiner's admission that Kadomura does not disclose the features of claim 1 and the dependent claims, the applicability of Kadomura to the claimed invention is not understood, and applicants submit that all claims patentably distinguish over Kadomura in the sense of 35 USC 103.

The Examiner is referred to 37 CFR §1.104(c)(2), which provides that when a reference is complex or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable and the pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified. In the office action, the Examiner specifically states what Kadomura does not teach in relation to the claimed invention, but fails to point out what Kadomura discloses or teaches in relation to the features claimed. Thus, the rejection as set forth by the Examiner is not understood. In any event, applicants submit that all claims patentably distinguish over Kadomura in the sense of 35 USC 103.

The Examiner then refers to the patent to Kawasaki, contending that Kawasaki teaches an electrically conductive member, apparently 11 in Fig. 7, disposed so as to be exposed to the plasma within the reaction chamber at a position with respect to the inner side wall. Assuming arguendo, that the member 11 which is a ground electrode disposed around the outer periphery of the electrode 5 is disposed within the reaction chamber, it being recognized that, as admitted by the Examiner, Kadomura does not disclose such an electrically conductive member disposed within the reaction chamber, the Examiner apparently disregards the other recited features of claim 1 that "the electrically conductive member has an area in a range of 0.1% to 10% of the inner wall area of the reaction chamber" and that "the electrically conductive member forming the DC earth is disposed at a position crossing a magnetic line of force that is closer to the substrate holder than a magnetic line of force that crosses the inner wall of the reaction chamber having the dielectric thereon". In this regard, it is not seen that Kawasaki discloses a dielectric covering a surface portion of an inner wall of the reaction chamber, nor the other

features as recited in claim 1 and the dependent claims. Further, it is noted that Kawasaki issued in 1989 and Kadomura was filed in 1998, some ten years later, and provides no disclosure or teaching regarding a grounded electrode, and must therefore be considered to have rejected the utilization of such a grounded electrode in the structure of Kadomura. Thus, applicants submit that the Examiner has engaged in a hindsight reconstruction attempt utilizing what applicant has taught against the teacher and which is not proper and such features as recited in claim 1 and the dependent claims are not disclosed or taught thereby.

More particularly, applicants submit that neither Kadomura nor Kawasaki provide a disclosure or teaching of the features of claim 1 of: (A) of an electrically conductive member disposed within the reaction chamber so as to be exposed to the plasma within the reaction chamber at a position with respect to the inner wall of the reaction chamber which is covered with the dielectric; (B) the electrically conductive member being electrically coupled to earth one of directly and through the inner wall of the reaction chamber so as to form a DC earth which enables direct current to flow therein from the plasma; (C) the electrically conductive member having an area in a range of 0.1% to 10% of the inner wall area of the reaction chamber; and/or (D) the electrically conductive member forming the DC earth being disposed at a position crossing a magnetic line of force that is closer to the substrate holder than a magnetic line of force that crosses the inner wall of the reaction chamber having a dielectric thereon. Applicants submit that Kadomura and Kawasaki, taken alone or in combination, at least fails to provide features (D) of claim 1. Thus, claims 1 and the dependent claims patentably distinguish over the cited art and should be allowable thereover.

With respect to the features of the dependent claims, applicants submit that looking to claim 4, for example, neither reference discloses the feature that the electrically conductive member forming the DC earth is located at a position within the reaction chamber where a floating potential plasma substantially equal to or greater than a floating potential of the plasma at the inner wall of the reaction chamber, covered with the dielectric with respect to the high frequency or the second high frequency. The other dependent claims such as claims 2, 5 and 8 recite specific features not disclosed in the cited art. Furthermore, with respect to newly added dependent claims 13 and 14, there is no disclosure or teaching in the cited art that the electrically conductive member is coupled to earth by a wire passing through the inner wall of the reaction chamber nor that the electrically conductive member enables suppression of chipping of the portion of the inner wall of the reaction chamber, as described in the specification of this application. Thus, applicants submit that all claims patentably distinguish over the cited art in the sense of 35 USC 103 and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 648.43518X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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